

Application No.: 09/355601

Case No.: 54545US002

Remarks

Claims 1, 6 – 15, 18, 20, 26 – 28, 31 – 35, and 38 have been pending. Claims 2 – 5, 16 – 17, 19, 21 – 25, 29 – 30, and 36 – 37 have been cancelled. Claim 20 is being cancelled.

Rejections Under 35 USC Section 112

Claims 1 – 3, 6 – 15, 18, 20, 26 – 28, 31 – 35, and 38 were rejected under Section 112, first paragraph, as failing to comply with the written description requirement. (Please note that claims 2 and 3 were cancelled in Applicants' communication filed on March 26, 2004.) The rejection is respectfully traversed for the following reasons.

The Examiner has asserted that undue experimentation by one skilled in the art is required because Applicants have failed to adequately describe how to obtain heat-activatable adhesives and PSAs.

The enablement requirement (not the written description requirement) has been interpreted to require that the claimed invention be enabled so that any person skilled in the art can make and use the invention without undue experimentation. The Examiner therefore appears to be arguing that Applicants' claims do not meet the enablement requirement of Section 112, first paragraph. The written description requirement is separate and distinct from the enablement requirement (MPEP § 2161).

The written description requirement "involves the question of whether the subject matter of a claim is supported by [conforms to] the disclosure of an application as filed" (MPEP § 2163.01). The rejected claims are supported by and conform to the disclosure of the application as filed.

Claim 1 is drawn to an adhesive composition comprising a silicone free polyurea-based polymer, comprising a segmented copolymer, wherein the copolymer comprises repeating units of Formula I wherein each B is independently a polyvalent radical selected from a group consisting of arylene, aralkylene, cycloalkylene, polyoxyalkylene, or mixtures thereof; each D is independently selected from the group consisting of hydrogen, an alkyl group, a cycloalkyl group, a phenyl group, a group that completes a ring structure that includes B to form a heterocycle, and mixtures thereof; each Z is independently a polyvalent radical having about 1 to

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about 20 carbon atoms; each Y is independently a polyoxyalkylene; m is an integer greater than zero; and a is zero or an integer greater than zero; and wherein the composition comprises a tackifier in an amount sufficient to provide the adhesive composition as a pressure sensitive adhesive and in an amount less than about 45 parts by weight tackifier per hundred part by weight polyurea-based polymer.

Every element of the claim is supported by and described in Applicants' specification. If the Examiner disagrees, Applicants respectfully request that the Examiner specifically point out which claim element or limitation is not supported by and described in the specification so that Applicants can direct the Examiner to the supporting text.

The subject matter of the claim does not have to be described literally (i.e., using the same terms or in *haec verba*) in order for the disclosure to satisfy the description requirement (MPEP §2163.02). Applicants therefore believe that the specification conveys with reasonable clarity to those skilled in the art that, as of the filing date, Applicants were in possession of the claimed subject matter. Thus, Applicants' respectfully request that the rejection under the written description requirement of Section 112, first paragraph, be withdrawn.

As discussed above, the written description requirement is separate and distinct from the enablement requirement. Therefore, even though the Examiner has stated that the rejection is based on the written description requirement, Applicants will address enablement.

According to §2164.01, the test of enablement is "whether one reasonably skilled in the art could make or use the invention from the disclosures in the patent coupled with information known in the art without undue experimentation." The Examiner has asserted that undue experimentation is required because "[t]here is no teaching which parameters . . . control the final property of the polymer (PSA or heat-activatable adhesives)."

Applicants' claims are limited to pressure sensitive adhesives (PSAs) by the language of claim 1, which states, "the composition comprises a tackifier in an amount sufficient to provide the adhesive composition as a pressure sensitive adhesive and in an amount less than about 45 parts by weight tackifier per hundred parts by weight polyurea-based polymer." If higher amounts of tackifier are used with some polyurea-based polymers, PSA properties may be difficult to obtain at room temperature; if tackifiers are used in lower amounts with other polyurea-based polymers, PSA properties may be difficult to obtain at room temperature (see, for

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example, page 16, lines 31 – 34). Such compositions may need to be heated to adhere the compositions to a surface. In other words, these compositions may be heat-activatable adhesives. But, when the composition comprises tackifier in appropriate amount, the polyurea-based polymers are PSAs. In other words, any polymer of the claimed structure can be made pressure sensitive by adding an appropriate amount of tackifier. Tackifiers render the polyurea-based polymer pressure-sensitive if it is not inherently tacky, for example, if it is a heat-activatable adhesive.

In addition, Applicants would like to point out that the groups claimed for B, D, Z, and Y are quite limited. The claims are not unduly broad.

Therefore, one skilled in the art would not have to engage in undue experimentation to determine which parameters in formula I would result in a PSA. One skilled in the art would only need to determine how much tackifier is required for a particular formulation. One skilled in the art would be familiar with making such determinations, as such determinations are typical in the art of PSAs. If any experimentation (for example, pressing a finger in an adhesive composition to determine if it is tacky at room temperature) would be required, it would not be undue. "The test of enablement is not whether any experimentation is necessary, but whether, if experimentation is necessary, it is undue" (MPEP §2164.01).

Applicants' claims thus meet both the written description requirement and the enablement requirement of Section 112, first paragraph. Applicants therefore respectfully request that any rejection under Section 112, first paragraph, be withdrawn.

Claims 1 – 3, 6 – 15, 18, 20, 26 – 28, 31 – 35 and 38 were rejected under Section 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The rejection is respectfully traversed for the following reasons.

Claim 20 is being cancelled.

The Examiner has asserted that "polyurea-based polymer" is indefinite since "based" encompasses a copolymer having a polyurea segment and any segment (not defined) since "comprises" permits any non-polyurea segment.

Applicants' specification clearly states that polyurea-based polymers are "segmented copolymers comprising a substantial proportion of urea linkages in the backbone of the polymer"

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(page 9, lines 25 – 27). Preferably, at least about 0.5 mole fraction (more preferably, at least about 0.75; even more preferably, at least about 0.95; most preferably, essentially 1.0) of the linkages between segments in the backbone of the polymer are urea linkages (see, for example, page 9, line 27, to page 10, line 1).

The Examiner is correct in that “comprises” permits any non-polyurea segments to make up the remaining segments of Applicants’ segmented copolymer comprising a substantial portion of urea linkages in the backbone of the polymer. In fact, Applicants’ specification states that the remainder of the linkages can be any suitable chemistry (for example, urethane linkages) (page 10, lines 1 – 2). This does not render the claims indefinite, however. “Comprising” is an open-ended term. It is used to specify that the named elements of the claim are essential, but that other elements may be added and still form a construct within the scope of the claim. By definition, “comprising” leaves the claim open for the inclusion of unspecified ingredients even in major amounts (MPEP §2163).

A claim is definite if “the scope of the claim is clear to a hypothetical person possessing the ordinary level of skill in the pertinent art” (MPEP §2171). The primary purpose of the requirement of definiteness of claim language is to ensure that the scope of the claim is clear so that the public is informed of the boundaries of what constitutes infringement of the patent” (MPEP §2173). The scope of Applicants’ claims is sufficiently clear that one of skill in the art of PSAs would recognize the scope and understand what constitutes infringement. It would be clear to one of skill in the art that any silicone free segmented copolymer comprising a substantial proportion of urea linkages in the backbone of the polymer that comprises the repeating units of Formula I falls within the the description of the silicone free-polyurea-based polymer of claim 1. Therefore, Applicants respectfully request that the rejection under Section 112, second paragraph, be withdrawn.

Concluding Remarks

In view of the above, it is submitted that the application is in condition for allowance. Reconsideration of the application is requested.

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Respectfully submitted,

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